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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,479	02/12/2002	Herbert T. Hayden	2236-090	7548

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EXAMINER	
NGUYEN, HUNG T	

ART UNIT	PAPER NUMBER
2636	

DATE MAILED: 02/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/075,479	HAYDEN, HERBERT T.	
	Examiner	Art Unit	
	Hung T. Nguyen	2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 February 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *2*.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-2, 5-8, 10-17 & 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slemon et al. (U.S. 5,910,765) in view of Allgood (U.S. 4,361,833).

Regarding claim 1, Slemon discloses a sensor loop for distributing indications of a condition monitored at different locations [figs.1-3, col.5, line 55 to col.6, line 21] comprising:

- a plurality of sensor unit (12a-f) coupled in series [figs.1-3, col.5, line 55 to col.6, line 21];
- a local power source [figs.1-3, col.5, line 55 to col.6, line 21 and col.8, lines 60-66];
- a local load [figs.1-3, col.5, line 55 to col.6, line 21].

Although, Slemon does not specifically mention a term "local sensor switch" is used in the sensor unit. However, Slemon does disclose all sensors in the array (12a-f) have a determinable detection capability and the individual sensors are positioned in the particular environment to detect characteristic of the event from different perspective [figs.1-3, col.4, lines 33-55, col.5, line 55 to col.6, line 21 and abstract] and

Furthermore, Allgood teaches a multi-sensor alarm system for protecting a premises includes at one sensor circuit (12) and alarm circuit (14) which are electrically interconnected at terminals (16,18). The sensor (12) type B (22) can be generally represented as two contact switches whose contact configuration is normally open type [figs.1-2, col.3, lines 56-68 and col.4, lines 35-47].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Allgood in the system of Slemon for improving sensor loop with distributed power source.

Regarding claim 2, Allgood discloses the sensor (12) type B (22) can be generally represented as two contact switches whose contact configuration is normally open type [figs.1-2, col.3, lines 56-68 and col.4, lines 35-47].

Regarding claim 5, Slemon discloses an alarm signal is activated when the sensors (12) exposed to the environment (26) [fig.2, col.7, lines 15-27].

Regarding claim 6, Allgood discloses the sensor (12) type B (22) can be generally represented as two contact switches whose contact configuration is normally open type [figs.1-2, col.3, lines 56-68 and col.4, lines 35-47].

Regarding claim 7, Slemon discloses an alarm signal is activated when the sensors (12) exposed to the environment (26) [fig.2, col.7, lines 15-27] and Allgood discloses the sensor (12) type B

(22) can be generally represented as two contact switches whose contact configuration is normally open type [figs.1-2, col.3, lines 56-68 and col.4, lines 35-47].

Regarding claims 8 & 10, Slemon discloses a sensor loop for distributing indications of a condition monitored at different locations [figs.1-3, col.5, line 55 to col.6, line 21] comprising:

- a plurality of sensor unit (12a-f) coupled in series [figs.1-3, col.5, line 55 to col.6, line 21];
- a local power source supplies a local voltage [figs.5-6, col.5, line 55 to col.6, line 21 and col.8, lines 60-66];
- a local load exhibits a local load impedance is inherently [figs.1-3, col.5, line 55 to col.6, line 57];

the alarm signal is activated when the sensors (12) exposed to the environment (26) [fig.2, col.7, lines 15-27] and

Allgood discloses the sensor (12) type B (22) can be generally represented as two contact switches whose contact configuration is normally open type [figs.1-2, col.3, lines 56-68 and col.4, lines 35-47].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Allgood in the system of Slemon for improving sensor loop with distributed power source.

Regarding claim 11, Slemon discloses an alarm signal is activated when the sensors (12) exposed to the environment (26) [fig.2, col.7, lines 15-27].

Regarding claim 12, Slemon does not discloses the sensor loop for distributing indications of a condition monitored at different locations wherein at least a portion of the local loads are relay coils. However, those skilled in the art will recognize that because the local loads can be realized in several ways as desired and the "relay coils" are not primary subject [figs.1-3, col.5, line 55 to col.6, line 57].

Regarding claim 13, Slemon discloses the sensor loop for distributing indications of a condition monitored at different locations [figs.1-3, col.5, line 55 to col.6, line 21] comprising:

- a plurality of sensor unit (12a-f) coupled in series [figs.1-3, col.5, line 55 to col.6, line 21];
- a local power source [figs.1-3, col.5, line 55 to col.6, line 21 and col.8, lines 60-66];
- a local load [figs.1-3, col.5, line 55 to col.6, line 21].

Slemon does disclose all sensors in the array (12a-f) have a determinable detection capability and the individual sensors are positioned in the particular environment to detect characteristic of the event from different perspective [figs.1-3, col.4, lines 33-55, col.5, line 55 to col.6, line 21 and abstract] and

Furthermore, Allgood teaches a multi-sensor alarm system for protecting a premises includes at three sensor circuit (12) and alarm circuit (14) which are electrically interconnected at terminals (16,18). The sensor (12) types A,B,C (20,22,24) can be generally represented as two contact switches whose contact configuration is normally closed, open, and closed-open types [figs.1-2, col.3, line 56 to col.5, line 27].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Allgood in the system of Slemon for improving & controlling every sensor loop with distributed power source.

Regarding claim 14, Allgood discloses the multi-sensor alarm system for protecting a premises includes at three sensor circuit (12) and alarm circuit (14) which are electrically interconnected at terminals (16,18). The sensor (12) types A,B,C (20,22,24) can be generally represented as two contact switches whose contact configuration is normally closed, open, and closed-open types [figs.1-2, col.3, line 56 to col.5, line 27].

Regarding claim 15, Slemon discloses the sensor loop for distributing indications of a condition monitored at different locations [figs.1-3, col.5, line 55 to col.6, line 21] comprising:

- a plurality of sensor unit (12a-f) coupled in series [figs.1-3, col.5, line 55 to col.6, line 21];
- a local power source [figs.1-3, col.5, line 55 to col.6, line 21 and col.8, lines 60-66];
- a local load [figs.1-3, col.5, line 55 to col.6, line 21].

Slemon does disclose all sensors in the array (12a-f) have a determinable detection capability and the individual sensors are positioned in the particular environment to detect characteristic of the event from different perspective [figs.1-3, col.4, lines 33-55, col.5, line 55 to col.6, line 21 and abstract] and

Furthermore, Allgood teaches a multi-sensor alarm system for protecting a premises includes at three sensor circuit (12) and alarm circuit (14) which are electrically interconnected at terminals (16,18). The sensor (12) types A,B,C (20,22,24) can be generally represented as two

contact switches whose contact configuration is normally closed, open, and closed-open types [figs.1-2, col.3, line 56 to col.5, line 27].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Allgood in the system of Slemon for improving & controlling every sensor loop with distributed power source.

Regarding claim 16, Slemon discloses a sensor loop for distributing indications of a condition monitored at different locations [figs.1-3, col.5, line 55 to col.6, line 21] comprising:

- a plurality of sensor unit (12a-f) coupled in series [figs.1-3, col.5, line 55 to col.6, line 21];
- a local power source [figs.1-3, col.5, line 55 to col.6, line 21 and col.8, lines 60-66];
- a local load [figs.1-3, col.5, line 55 to col.6, line 21].

Although, Slemon does not specifically mention a term "local sensor switch" is used in the sensor unit. However, Slemon does disclose all sensors in the array (12a-f) have a determinable detection capability and the individual sensors are positioned in the particular environment to detect characteristic of the event from different perspective [figs.1-3, col.4, lines 33-55, col.5, line 55 to col.6, line 21 and abstract] and

Furthermore, Allgood teaches a multi-sensor alarm system for protecting a premises includes at one sensor circuit (12) and alarm circuit (14) which are electrically interconnected at terminals (16,18). The sensor (12) type B (22) can be generally represented as two contact switches whose contact configuration is normally open type [figs.1-2, col.3, lines 56-68 and col.4, lines 35-47].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Allgood in the system of Slemon for improving sensor loop with distributed power source.

Regarding claim 17, Slemon discloses the sensor loop for distributing indications of a condition monitored at different locations [figs.1-3, col.5, line 55 to col.6, line 21] comprising:

- a plurality of sensor unit (12a-f) coupled in series [figs.1-3, col.5, line 55 to col.6, line 21];
- a local power source [figs.1-3, col.5, line 55 to col.6, line 21 and col.8, lines 60-66];
- a local load [figs.1-3, col.5, line 55 to col.6, line 21].

Slemon does disclose all sensors in the array (12a-f) have a determinable detection capability and the individual sensors are positioned in the particular environment to detect characteristic of the event from different perspective [figs.1-3, col.4, lines 33-55, col.5, line 55 to col.6, line 21 and abstract] and

Furthermore, Allgood teaches a multi-sensor alarm system for protecting a premises includes at three sensor circuit (12) and alarm circuit (14) which are electrically interconnected at terminals (16,18). The sensor (12) types A,B,C (20,22,24) can be generally represented as two contact switches whose contact configuration is normally closed, open, and closed-open types [figs.1-2, col.3, line 56 to col.5, line 27].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Allgood in the system of Slemon for improving & controlling every sensor loop with distributed power source.

Regarding claim 19, Slemon discloses an alarm signal is activated when the sensors (12) exposed to the environment (26) [fig.2, col.7, lines 15-27].

3. Claims 3-4, 9, 18 & 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slemon et al. (U.S. 5,910,765) in view of Allgood (U.S. 4,361,833) in view of Curto et al. (U.S. 6,311,107).

Regarding claim 3, The combination of Slemon & Allgood is still missing the local sensor is provided by an anemometer / weather / temperature.

Curto teaches a wind advisory system having ground station which comprises an anemometer (4) for sensing wind speed, wind direction and wind gust at the airfield and outputs the wind conditions to a microcomputer (6) [fig.1, col.1, lines 57-65 and col.2, lines 51-59].

Therefore, it would have been obvious to one having ordinary skill in the art to have the teaching of Allgood & Curto includes anemometer sensor in the system of Curto for detecting the wind conditions may vary somewhat between the different locations.

Regarding claim 4, Slemon does disclose all sensors in the array (12a-f) have a determinable detection capability and the individual sensors are positioned in the particular environment to detect characteristic of the event from different perspective which may includes a solar collector as desired [figs.1-3, col.4, lines 33-55, col.5, line 55 to col.6, line 21 and abstract] and Curto discloses a wind advisory system having ground station which comprises an anemometer (4) for sensing wind speed, wind direction and wind gust at the airfield and outputs the wind conditions to a microcomputer (6) [fig.1, col.1, lines 57-65 and col.2, lines 51-59].

Therefore, it would have been obvious to one having ordinary skill in the art to have the teaching of Allgood & Kaiser in the system of Curto to monitor an environment phenomenon.

Regarding claim 9, Slemon does disclose all sensors in the array (12a-f) have a determinable detection capability and the individual sensors are positioned in the particular environment to detect characteristic of the event from different perspective which may includes a solar collector as desired [figs.1-3, col.4, lines 33-55, col.5, line 55 to col.6, line 21 and abstract] and Curto discloses a wind advisory system having ground station which comprises an anemometer (4) for sensing wind speed, wind direction and wind gust at the airfield and outputs the wind conditions to a microcomputer (6) [fig.1, col.1, lines 57-65 and col.2, lines 51-59].

Therefore, it would have been obvious to one having ordinary skill in the art to have the teaching of Allgood & Kaiser in the system of Curto to monitor an environment phenomenon.

Regarding claim 18, Slemon does disclose all sensors in the array (12a-f) have a determinable detection capability and the individual sensors are positioned in the particular environment to detect characteristic of the event from different perspective which may includes a solar collector as desired [figs.1-3, col.4, lines 33-55, col.5, line 55 to col.6, line 21 and abstract] and Curto discloses a wind advisory system having ground station which comprises an anemometer (4) for sensing wind speed, wind direction and wind gust at the airfield and outputs the wind conditions to a microcomputer (6) [fig.1, col.1, lines 57-65 and col.2, lines 51-59].
Therefore, it would have been obvious to one having ordinary skill in the art to have the teaching of Allgood & Kaiser in the system of Curto to monitor an environment phenomenon.

Regarding claim 20, Slemon discloses the sensor loop for distributing indications of a condition monitored at different locations [figs.1-3, col.5, line 55 to col.6, line 21] comprising:

- a plurality of sensor unit (12a-f) coupled in series [figs.1-3, col.5, line 55 to col.6, line 21];
- a local power source [figs.1-3, col.5, line 55 to col.6, line 21 and col.8, lines 60-66];
- a local load [figs.1-3, col.5, line 55 to col.6, line 21].

Slemon does disclose all sensors in the array (12a-f) have a determinable detection capability and the individual sensors are positioned in the particular environment to detect characteristic of the event from different perspective [figs.1-3, col.4, lines 33-55, col.5, line 55 to col.6, line 21 and abstract] and

Furthermore, Allgood teaches a multi-sensor alarm system for protecting a premises includes at three sensor circuit (12) and alarm circuit (14) which are electrically interconnected at terminals (16,18). The sensor (12) types A,B,C (20,22,24) can be generally represented as two contact switches whose contact configuration is normally closed, open, and closed-open types [figs.1-2, col.3, line 56 to col.5, line 27].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the teaching of Allgood in the system of Slemon for improving & controlling every sensor loop with distributed power source.

The combination of Slemon & Allgood is still missing the local sensor for detecting wind condition.

Curto teaches a wind advisory system having ground station which comprises an anemometer (4) for sensing wind speed, wind direction and wind gust at the airfield and outputs the wind conditions to a microcomputer (6) [fig.1, col.1, lines 57-65 and col.2, lines 51-59].

Therefore, it would have been obvious to one having ordinary skill in the art to have the teaching of Allgood & Curto includes anemometer sensor in the system of Curto for detecting the wind conditions may vary somewhat between the different locations.

Regarding claim 21, Slemon discloses an alarm signal is activated when the sensors (12) exposed to the environment (26) [fig.2, col.7, lines 15-27].

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Stuetermann (U.S. 4,474,169) Solar heat collector control device.
- Powers et al. (U.S. 5,381,136) Remote data collection and monitoring system for distribution line.
- Smurlo et al. (U.S. 5,493,273) System for detecting perturbations in an environment using temporal sensor data.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung T. Nguyen whose telephone number is (703) 308-6796. The examiner can normally be reached on Monday to Friday from 8:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hofsass, Jeffery can be reached on (703) 305-4717. The fax phone number for this Group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Examiner: Hung T. Nguyen

Date: Jan. 29, 2004